Quantitative Evaluation of King County Care Partners' Rethinking Care Intervention: Interim Analysis of Social and Health Outcomes

Brief Report

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EXECUTIVE SUMMARY

Approximately 5% of Medicaid beneficiaries generate more than 50% of related state spending[1]. *Rethinking Care* (RTC) provides community-based, registered nurse-led, multidisciplinary care management to high-cost Medicaid beneficiaries with behavioral health needs and multiple chronic conditions in King County, Washington.

We compared outcomes pre- and post-intervention for a subset of individuals randomized to the first RTC referral group (n = 390) and a matched comparison group selected from a waiting list (n = 390). Analyses were conducted to examine the impact of the intervention on per member per month (PMPM) medical service use and costs, alcohol, drug treatment service use and cost, and criminal justice involvement.

Of those offered the RTC intervention, 63% completed an initial assessment and 51% set at least one care plan goal. Relative to the comparison group, the RTC group had:

- Lower PMPM psychiatric inpatient costs (-$40; p=0.09),
- A lower proportion of individuals with any arrests or criminal charges between the pre- and post periods (43% decrease versus 10% increase in the comparison group)
- Fewer PMPM criminal charges (-0.02; p=0.04),
- Higher odds of receiving inpatient alcohol and drug treatment (OR=3.22; p=0.06) and
- Higher PMPM inpatient alcohol and drug treatment costs ($18 PMPM; p=0.02) in the post-period.

Results for the RTC intervention are in the expected direction and, thus, promising. Intensive care management may benefit high-cost Medicaid clients and the state through reduced psychiatric inpatient costs, reduced criminal activity and higher use of alcohol and drug treatment.

[1] Washington State Department of Social and Health Services. Fact Sheet: Aging and Disability Services Administration Chronic Care Management Project. January 2010.

Background

The Rethinking Care (RTC) intervention is a community-based, registered nurse (RN)-led, multidisciplinary care management designed to empower clients and enhance coordination, communication, and integration of services across safety-net providers.[2] In Washington State, RTC was funded by the Center for Health Care Strategies through a contract with Washington State Health Medicaid Purchasing Administration (MPA) in the state Department of Social and Health Services (DSHS).

RTC clients were identified as being at risk of having future high medical expenses. They can receive up to two years of intensive care management from a clinical team of RNs and social workers. Care management includes an in-person comprehensive assessment; collaborative goal setting; chronic disease self-management coaching; physician visits of clients accompanied by their care managers; frequent in-person and phone monitoring; connection to community resources; and coordination of care across the medical and mental health system.[3] The key elements of the RTC intervention are published in detail elsewhere.[3] To encourage participation in the RTC intervention, a variety of techniques were employed including client outreach efforts by a skilled survey research team.[4]

This brief report summarizes the key findings of a preliminary quantitative evaluation of the RTC intervention conducted by the Center for Healthcare Improvement for Addictions, Mental Illness and Medically Vulnerable Populations (CHAMMP) at the University of Washington at Harborview Medical Center. Complete results and technical details of the evaluation are available at: http://www.chammp.org/Program-Evaluation/Reports-and-Publications.aspx. The quantitative evaluation aimed to assess the first-year impact of offering the RTC intervention on: medical costs and service use, alcohol and drug treatment, criminal activity, homelessness, and death.

Outcomes through March 2010 were compared for the 390 eligible clients randomized to receive the RTC intervention in February or March 2009 to those of 390 similar individuals who did not receive the intervention during this time period. Outcomes were examined in the year prior to randomization (pre-period) and up to 14 months following randomization (post-period). Data from all clients in the RTC group were used, regardless of whether they engaged in the RTC intervention. All data were derived from the state DSHS Research and Data Analysis (RDA) Client Outcomes Database (CODB)[5].

[2] For a description of a typical client served by RTC. see: Court, B. J., Mancuso, D., Zhu, Ch., & Krupski, A. (in press). Predictive Risk Intelligence System (PRISM): A decision-support tool for coordinating care for complex Medicaid clients. In Schraeder, C. (Ed), Medicaid Care Management Best Practices. New York: John Wiley & Sons, Inc.

[3] Lessler, D. S., Krupski, A., Cristofalo, M. (in press). King County Care Partners: A community-based chronic care management system for Medicaid clients with co-occurring medical, mental and substance abuse disorders. In Schraeder, C. (Ed), Medicaid Care Management Best Practices. New York: John Wiley & Sons, Inc.

[4] Court, B. (July 28, 2010). Enhanced Client Engagement Project Report. Olympia, WA: Washington State Medicaid Purchasing Administration, Office of Quality and Care Management. Also see http://www.chcs.org/publications3960/publications_show.htm?doc_id=1261169

[5] Kohlenberg, L. (2009). Integrated client database. Data that improves DSHS decision making and services. Olympia, WA: Washington State Department of Social and Health Services, Research and Data Analysis Division. Report No. 11.144. Also available at: http://www.dshs.wa.gov/pdf/ms/rda/research/11/144.pdf

Key Findings

Client engagement rates for RTC exceeded those of a prior pilot intervention

Of those offered the RTC intervention, 63% completed an initial assessment and 51% set at least one care plan goal. In an earlier pilot project, only 18% of those offered the intervention accepted.[6]

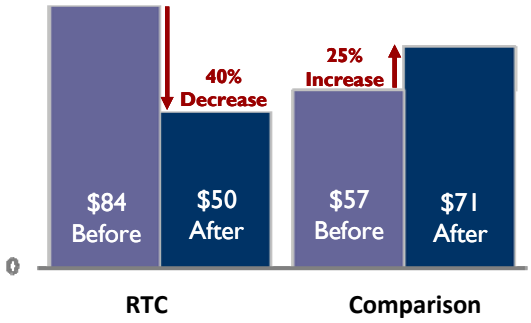
RTC clients did not differ from comparison group members on most outcomes

There were no differences in the following per-member per month (PMPM) outcomes between the two groups: Total Medicaid medical costs, inpatient costs, emergency department (ED) costs, long term care costs, in-home service costs and prescription drug costs. Service use patterns including ED visits, inpatient admissions, and PMPM prescription drug counts were also similar between the groups.

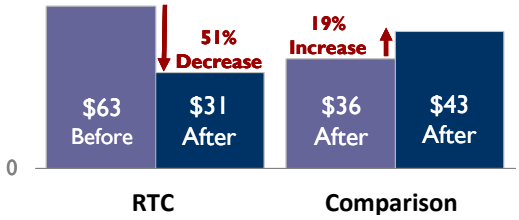
The RTC group had lower psychiatric inpatient costs

Relative to the comparison group, the group offered RTC services had lower PMPM psychiatric inpatient costs (- $40; p=0.09). While small in magnitude, and not statistically significant, this finding represents a trend in the expected direction. With intensive care management, individuals with serious mental illness may receive needed treatment or prescriptions, improve adherence and thus have less expensive community psychiatric hospital admissions when they occur. As there was no difference in the proportion experiencing psychiatric hospitalization overall or in State hospital costs, we attribute this finding to costs associated with community psychiatric hospital admissions.

RTC Group Had Lower PMPM Community Psychiatric and State Hospital Inpatient Costs in the Post Period



RTC Group Had Lower PMPM Community Psychiatric Costs in the Post Period

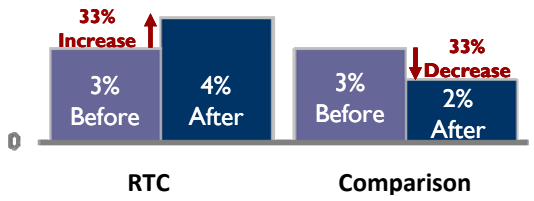


[6] Court, B. Enhanced Client Engagement Project Report. Washington State Medicaid Purchasing Administration, Office of Quality and Care Management. July 28, 2020. Reference ID #100568

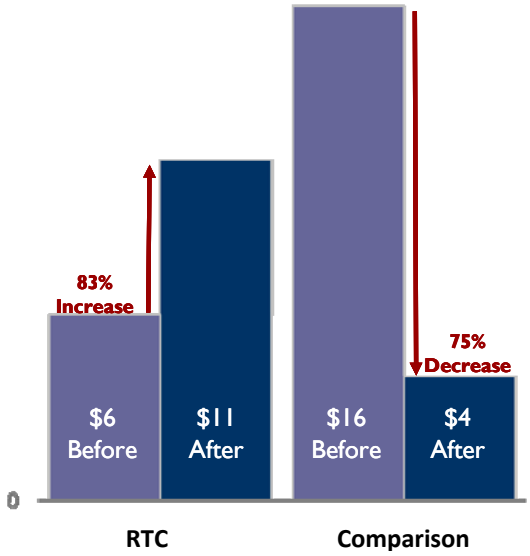
The RTC group was more likely to receive inpatient alcohol and drug treatment

In the RTC group, the proportion of clients incurring payments for alcohol and drug inpatient treatment increased while this proportion declined in the comparison group. The odds of incurring any alcohol and drug inpatient treatment payments was more than three-fold higher for the RTC group relative to the comparison group between the pre- and post-periods (OR=3.22; p=0.06).

RTC Group Had Higher Odds of Receiving Alcohol/Drug Inpatient Treatment Payments



RTC Group Had Lower PMPM Payments for Alcohol/Drug Inpatient Treatment



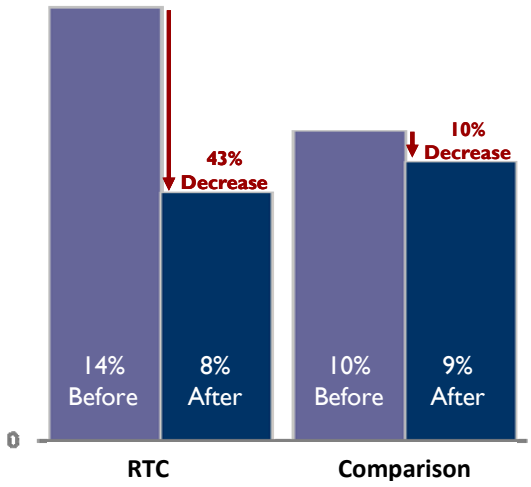
Similarly, among clients in the RTC intervention group, average PMPM payments for inpatient alcohol and drug treatment increased while average payments decreased between the pre- and post-periods for the comparison group. The difference in average PMPM costs for the RTC group relative to the comparison group was $18 higher ($p<0.05$) between the pre- and post-periods.

Intensive care management could lead to referral to needed services including inpatient alcohol and drug treatment. Although these costs are higher for the intervention group in the short run, they could pay dividends in future outcomes (e.g., decreased criminal activity or improved physical health).

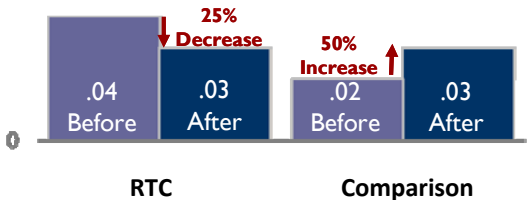
The RTC group had fewer arrests and charges

In both groups, the proportion of individuals with any arrests or criminal charges declined between the pre- and post-periods; this decline was larger in the RTC group (43% decrease versus 10% decrease in the comparison group), resulting in lower odds of incurring any arrests or charges (OR=0.54; p<0.06) for the RTC group.

RTC Group Had Lower Odds of Any Arrests or Charges



RTC Group Had Lower PMPM Total Criminal Charges



In the RTC group, the mean PMPM number of criminal charges declined between the pre- and post-periods (25% decrease). In contrast, this measure increased in the comparison group (50% increase), resulting in 0.02 fewer average PMPM charges (p<0.05) for the RTC group in the post-period.

Intensive care management with referral to needed services, including mental health and drug and alcohol treatment could lead to reduced criminal behavior. Such findings may have important public safety implications or lead to cost savings in the criminal justice system.

Limitations

The findings reported here are preliminary and, as such, should be interpreted with caution. For example, the findings may be subject to selection bias given that clients who chose to engage in the RTC program may be quite different from individuals who did not. There could be non-observable characteristics that we could not match on, that could have resulted in a non-equivalent comparison group. For many individuals, data were available for a follow-up period less than one year. The short follow-up period may exclude important outcomes or it may be that program impacts in this medically high-risk population take longer than one year to emerge. Future analysis will include data over a longer follow-up period.

Conclusions and Recommendations

The RTC intervention may offer benefits to clients and to the State through reduced psychiatric inpatient costs, increased access to inpatient alcohol and drug treatment and reduced criminal activity. These findings, though preliminary, are encouraging and support continuation of the RTC intervention.